

REMARKS

Status of the Claims

Upon entry of the amendment above, claims 1-13, 15-18, and 20-35 will be pending, claims 1, 5, 7, 18, and 21 being independent.

Summary of the Office Action

Claims 1, 3-6, 11-13, 18, 20, 21, 22, 25, 26, and 28 are rejected under 35 USC §103(a) as being unpatentable over HARDT (US Patent Application Publication No. 2003/0150134) in view of HARRISON (U.S. Patent No. 6,055,748).

Claim 2 is rejected under 35 §103(a) as being unpatentable over POLIFRONI (U.S. Patent No. 6,817,115) in view of HARDT and HARRISON.

Claims 7, 10, 15-17, 23, 24, and 27 are rejected under 35 USC §103(a) as being unpatentable over BONAVENTURE (U.S. Patent No. 5,228,218) in view of HARDT and HARRISON.

Claims 8 and 9 are rejected under 35 USC §103(a) as being unpatentable over BONAVENTURE in view of HARDT, HARRISON, and MAREGA (U.S. Patent No. 4,920,666).

Claims 11, 13, 15, and 18 are rejected under 35 USC §112, second paragraph, as indefinite.

Response to the Office Action

A. Summary of the Amendment

Dependent claims 3, 7, 11, 27, and 28 have been amended to improve their form, the substance of the claims remaining the same. Claim 4 has been amended for consistency with claim 1, from which it depends.

New claims 29-35 have been added. Claim 29, which depends from claim 2, adds the limitation that the anti-slip insert is the only anti-slip insert of the inner sole and that the recess of the lower surface of the inner sole is located at least in a metatarsophalangeal articulation area of the inner sole.

New claim 30, which depends from independent claim 7, and claim 33, which depends from dependent claim 8, add the limitation of the lower surface of the inner sole of the claimed sports

boot. Claim 31, which depends from claim 30, and claim 34, which depends from claim 33, add the limitation of a lowermost felt layer within which the recess is positioned.

New claims 32 and 35 add the limitation that the abrasive insert of parent claims 7 and 8, respectively, is the only abrasive insert affixed to the inner sole and that the lower surface of the inner sole has a recess located at least in the metatarsophalangeal articulation area of the inner sole.

Paragraphs 0010 and 0012 of the specification have been amended to provide antecedent bases for terms appearing in the new claims.

No prohibited new matter has been introduced by way of the amendment, all subject matter having been presented in the originally filed specification and/or in the drawings.

B. Withdrawal of Indefiniteness Rejection

Applicants kindly request reconsideration and withdrawal of the rejection of claims 11, 13, 15, and 18 under 35 USC §112, second paragraph for reasons of record as well as for the following reasons.

Claim 11, e.g., includes the limitation “said abrasive paper or abrasive fabric provides an abrasive anti-slip feature for the inner sole only upon a certain downward pressure being exerted on the inner sole.” The other rejected claims include similar language.

The “Response to Arguments” section, on page 4 of the Office action, explains that “[i]t is not clear what structural limitations/materials applicant intends to encompass with such language. It appears that rubber materials, sandpaper, merely a piece of fabric with a large weave would read on such language, i.e. this language appears to read on almost all antislip materials.”

Based upon the quoted passage of the Office action, the rejection appears to equate the perceived breadth of the rejected claims with indefiniteness. In this regard, Applicants request that the rejection be withdrawn at least for the reason explained in the Manual of Patent Examining Procedure, Section 2173.04, which references *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). Such reason is similar to that of record, in which Applicants had cited MPEP §2173.05(a), which references *In re Zletz*, 893 F.2d 319, 13 USPQ2d 1320 (Fed. Cir. 1989).

C. Withdrawal of Rejection of Independent Claim 7 and Claims Depending from Claim 7

Applicants kindly request that the rejection of independent claim 7, as well as the claims which depend from independent claim 7, be reconsidered and withdrawn at least for the following reasons.

Independent claim 7 is directed to a specific embodiment of the invention disclosed in Applicants' instant application. Specifically, claim 7 calls for a "sports boot" having a liner positioned within a shell. In claim 10, which depends from claim 7, the sports boot is further limited to a "ski boot" having a rigid plastic shell having been formed by injection molding. Further, according to claim 7, the liner is not fixed to the shell, but is removable therefrom.

Still further, according to claim 7, the sports boot includes an inner sole supported by the upwardly facing foot-supporting surface of the liner and an abrasive insert is positioned between a lower surface of the inner sole and the upwardly facing foot-supporting surface of the liner.

Sports boots, particularly ski boots, are commonly tightly fit around the wearer, which ensures good foot retention and imperviousness to external elements, i.e., imperviousness to the infiltration of moisture, such as from water and snow, as explained in paragraph 0004 of the Applicants' specification. However, a problem is created inasmuch as such objectives are at odds with the ease of putting on and taking off the boot from the foot. In particular, when such a boot is removed, the entire metatarsophalangeal area of the wearer's foot remains in contact with the inner sole as the foot is pulled rearwardly, before the wearer can lift the foot from the inside of the boot. During the first part of the removal of the boot, downward pressure is exerted against the inner sole as the foot is moved rearwardly.

Further, as explained in paragraph 0004 of Applicants' specification, because of the forces exerted by the wearer's foot and the relative flexibility of the inner sole, the inner sole can be damaged, such as by being folded like an accordion, which renders it difficult to put the boot on again, as mentioned at the end of paragraph 0004.

Although molded anti-slip insoles are known, such as disclosed in U.S. Patent No. 4,897,937, mentioned in paragraph 0003 of Applicants' specification, such insoles disadvantageously add layers to the insole, which goes against the objective sought in being able to transmit forces, such as forces that are transmitted between the skier and the ski upon which the skier is supported. In addition, rubber-based anti-slip material, or similar materials, can hinder the removal and manual positioning of the inner sole, as mentioned at the end of paragraph 0004 of Applicants' specification.

Rather than using a molded or rubber-based insole (or one made of similar material), Applicants have found that if an **abrasive** insert is fixed to the lower surface of the inner sole, the aforementioned problems are overcome.

As explained on page 11 of Applicants' prior reply, the term "abrasive" refers to a wearing away, i.e., a destructive effect made to a material. Of course, in a specific embodiment, such as specified in claim 16 (which depends from independent claim 7), the abrasive insert of claim 7 can include a sheet of paper or fabric having a coating of abrasive particles (such as a sandpaper mentioned in paragraph 0013 of Applicants' specification).

As additionally explained on page 12 of Applicants' prior reply, friction and abrasion are different phenomena.

The rejection relies primarily upon BONAVENTURE, which is commonly owned with the instant application, and which discloses a rear entry ski boot having an inner sole. No particular disclosure is provided regarding an anti-slip insert. To remedy this defect in BONAVENTURE meeting the terms of Applicants' claim 7 (and claims depending therefrom), the Office action additionally relies upon HARDT and HARRISON, with HARDT proposed to modify BONAVENTURE and with HARRISON proposed to modify HARDT.

More specifically, the rejection postulates that "[i]t would have been obvious to provide a sandpaper-like surface on the lower surface of the innersole as taught by Hardt and to use a paper with abrasive material thereon and adhesive for attaching as taught by Harrison on the innersole of Bonaventure to prevent the innersole from slipping during wear."

The rejection fails to identify any “insert,” specifically, an anti-slip *insert*, as claimed by Applicants. Instead, the rejection merely alleges that HARDT provides “an antislip abrasive *surface*.”

In addition, although HARDT discloses, in his paragraph 0027, that the insole of his invention (molded of polyurethane or other molded foam, as mentioned in paragraph 0020) can be molded “so that it has a rough surface similar to fine sandpaper,” to prevent slipping of the insole, such disclosure fails to respond to the disadvantage of molded anti-slip materials, rubber-based or otherwise, which can hinder the removal and manual positioning of the inner sole, mentioned at the end of Applicants’ paragraph 0004.

In this regard, i.e., in terms of the failure to provide an abrasive insert, Applicants submit that the teachings of HARDT are not much different from those of POLIFRONI (upon which all of Applicants’ claims were rejected, either solely or in combination with other reference(s), in the prior Office action). That is, each is directed to a molded plastic arch support. Although a roughened surface is featured in each, neither discloses an abrasive surface for an insole, notwithstanding HARDT’s disclosure in paragraph 0027 mentioned above. Further, POLIFRONI provides evidence, in his explanation in column 2, lines 2-4, that a molded arch support provides “improved non-slip frictional properties, *without tending to damage any surface against which it is placed*.”

To remedy the defect in HARDT to meet the terms of Applicants’ claim 7, by modifying the disclosure of BONAVENTURE by means of that which is disclosed by HARDT, the Office action next relies upon HARRISON to modify the HARDT-modified BONAVENTURE combination.

The problem with HARRISON, however, is that his “sandpaper-like antislip ... paper substrate with abrasive material thereon” is merely for providing a traction strip to an *external* sole “to enhance the traction between the sole and the ground surface help reduce the chance the wearer slipping on the ground surface.” See column 5, lines 1-13 of HARRISON.

The rejection, in relying upon HARRISON, evidences a technical prejudice, i.e., a distortion caused by hindsight bias reliant upon *ex post* reasoning, which the U.S. Supreme Court cautioned against in its recent decision *KSR Int'l Co. v. Teleflex Inc. et al.*, 550 U.S. ____ (2007), Slip Op. 04-1350 (April 30, 2007), at page 17.

The recent (May 3, 2007) memorandum of the Deputy Commissioner for Patent Operations, the subject of which was entitled “Supreme Court decision on *KSR Int'l Co. v. Teleflex, Inc.*,” directed that “it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.”

However, Applicants respectfully submit, the reason provided in the rejection is inadequate in supplying a reason why one skilled in the art would have modified the BONAVENTURE boot, once modified by HARDT, to be further modified by HARRISON. That is, rather than explaining *why* a person of ordinary skill in the art would have modified the BONAVENTURE+HARDT combination by means of HARRISON, the rejection merely identifies *what* the abrasive material of HARRISON does. No explanation is presented, nor is one apparently available, why one skilled in the art would use the traction strips for the bottom of an outer sole, which is intended to reduce the likelihood that the wearer would slip on the ground while walking, *on the inside of a shoe*. The last sentence of the rejection (page 4, Section 4, of the Office action) states that the HARRISON teaching would “prevent the innersole from slipping during wear.” But – the HARDT-modified BONAVENTURE boot would already prevent slipping of the insole, albeit in a way that retains the disadvantages noted by Applicants and, by the way, the advantage noted by the prior art, i.e., POLIFRONI, mentioned above. The only reason that HARRISON is additionally relied upon, it would seem, is for the purpose of rejecting Applicants’ claims. That is, based upon no suggestion, whether implicit or explicit, nor common sense of one skilled in the art, would one skilled in the art, absent Applicants’ disclosure, have modified the HARDT-modified BONAVENTURE boot with the further disclosure of HARRISON.

In *Ex parte Mary Smith*, Appeal 2007-1925 (June 25, 2007), the Board of Patent Appeals and Interferences comments upon the value of “common sense” identified by the Supreme Court in *KSR*, at 16-17, by quoting *KSR*:

Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.

The rejection at issue, however, forces various pieces together not intended to be so fit. Instead, common sense holds that one skilled in the art would not want to damage the interior surface of a boot (explained by POLIFRONI), i.e., common sense holding that if an anti-slip feature were to be desired for an insole, a molded rubber/plastic-based material would be used. HARRISON, after all, is not concerned with damaging a surface of his shoe, inasmuch as the abrasive strips only come in contact with the ground surface upon which the user walks.

In *KSR*, the Supreme Court rejected the “rigid approach” of the so-called “teaching, suggestion, or motivation” test (i.e., TSM test), while affirming the principles of *Graham v. John Deere Co.*, 383 U.S. 1 (1966). After explaining that neither the enactment of the statute 35 USC §103 nor its analysis in *Graham* “disturbed this Court’s earlier instructions concerning the need for caution in granting a patent based on the combination of elements found in the prior art,” the Court cited *United States v. Adams*, 383 U.S. 39, 40 (1966) as an illustration of the doctrine to be applied in deciding obviousness. *Id.*, at 11-12.

In *Adams*, in finding the claimed invention *nonobvious*, the Court explained in *KSR*, “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR*, at 12.

Like the illustration provided by *Adams*, the prior art of record in the instant application, including POLIFRONI in particular, there is a teaching away, i.e., the advantage in having a non-slip insole not damaging any surface against which it is placed.

At least for all of the foregoing reasons, reconsideration and withdrawal of the rejection of independent claim 7 and the claims which depend therefrom, are kindly requested.

In addition, rejected claim 27 specifies that “the inner sole has a flexibility for being deformed into an accordion shape during withdrawal of a wearer’s foot from the article of footwear.” This feature is not disclosed by the disclosures of the documents relied upon in the rejection, nor is the limitation of claim 27 addressed.

In addition, in the amendment above, Applicants have presented new claims 30-35 which depend – directly or indirectly – from claim 7. At least for the foregoing reasons, the allowance of claims 30-35 is also requested.

However, claims 30 and 33 provide the additional limitation of a recess in the lower surface of the inner sole within which the abrasive insert is positioned and claims 31 and 34 further specifying that the lowermost layer of the inner sole is a felt layer, the recess being in the felt layer.

Further, claims 32 and 35 specify that the abrasive insert is the *only* abrasive insert affixed to the inner sole and such insert is positioned in a recess at least in the metatarsophalangeal articulation area of the inner sole. Neither HARDT nor HARRISON discloses the subject matter of claims 32 or 35.

D. Withdrawal of Rejection of Dependent Claims 8 and 9

Applicants kindly request that the rejection of dependent claims 8 and 9 be reconsidered and withdrawn at least for the reasons given above with regard to the withdrawal of the rejection of independent claim 7, upon which claim they depend.

E. Withdrawal of Rejection of Independent Claims 1, 3, 5, 18 and Claims Depending from Claims 1, 3, 5, 18

Applicants kindly request that the rejection of independent claims 1, 3, 5, and 18, as well as the claims which depend from independent claims 1, 3, 5, and 18, be reconsidered and withdrawn at least for the following reasons.

These claims, which are directed to an inner sole for an article of footwear (claims 1 and 3) and for an article of footwear that includes an inner sole (claim 5), are rejected over the combination of HARDT and HARRISON.

Applicants submit that the rejection based upon the combination of HARDT and HARRISON should be withdrawn for substantially the same reasons as advanced above regarding the rejection based upon BONAVENTURE, HARDT and HARRISON.

No abrasive *insert* is evidenced by HARDT or HARRISON.

Further, although HARDT discloses, in his paragraph 0027, that the insole of his invention (molded of polyurethane or other molded foam, as mentioned in paragraph 0020) can be molded “so that it has a rough surface similar to fine sandpaper,” to prevent slipping of the insole, such disclosure fails to respond to the disadvantage of molded anti-slip materials, rubber-based or otherwise, which can hinder the removal and manual positioning of the inner sole, mentioned at the end of Applicants’ paragraph 0004.

In this regard, i.e., in terms of the failure to provide an abrasive insert, the teachings of HARDT are not much different from those of POLIFRONI (upon which all of Applicants’ claims were rejected, either solely or in combination with other reference(s), in the prior Office action). In this regard, each is directed to a molded plastic arch support. Although a roughened surface is featured in each, neither discloses an abrasive surface for an insole, notwithstanding HARDT’s disclosure in paragraph 0027 mentioned above. Further, POLIFRONI provides evidence, in his explanation in column 2, lines 2-4, that a molded arch support provides “improved non-slip frictional properties, *without tending to damage any surface against which it is placed.*”

To remedy the defect in HARDT to meet the terms of Applicants' claim 1, rejection relies upon HARRISON to modify HARDT.

The problem with HARRISON, however, is that his "sandpaper-like antislip ... paper substrate with abrasive material thereon" is merely for providing a traction strip to an *external* sole "to enhance the traction between the sole and the ground surface help reduce the chance the wearer slipping on the ground surface." See column 5, lines 1-13 of HARRISON.

The recent (May 3, 2007) memorandum of the Deputy Commissioner for Patent Operations, the subject of which was entitled "Supreme Court decision on *KSR Int'l Co. v. Teleflex, Inc.*," as mentioned above in connection with the rejection of claims 7+, directed that "it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed."

The reason provided in the rejection as to why one skilled in the art would have modified HARDT by means of HARRISON is that given in the last sentence of the rejection (page 2, Section 2, of the Office action), viz., that the HARRISON teaching would "allow a user to easily adjust the location and/or amount of antislip surface desired on the inner sole." But, Applicants submit, there is no reason evident in HARDT or even HARRISON why one would want to have modified an arch support – HARDT's arch support in particular – so that less than the entire bottom surface would be provided with a rough surface, as described in HARDT's paragraph 0027. Further, by providing adhesive strips, like those of HARRISON, the arch support of HARDT is made more complicated than necessary to achieve HARDT's objectives.

The rejection, in relying upon HARRISON, evidences a technical prejudice, i.e., a distortion caused by hindsight bias reliant upon *ex post* reasoning, which the U.S. Supreme Court cautioned against in its recent *KSR* decision, at page 17.

First, no insert is provided by either HARDT or HARRISON, as mentioned above, nor is there any allegation that it would have been obvious to have provided an insert.

Further, by basing the rejection at issue upon the combination of HARRISON with HARDT, the position advanced by the Office action is that one skilled in the art would be ready to have the inner surface of a shoe, within which HARDT's arch support is to be used, to be damaged by an abrasive surface of the arch support. As explained above, the prior art, in the form of POLIFRONI, shows that damage to the inner surfaces of shoes by means of an insole is to be prevented. HARRISON uses an abrasive surface, although he does so for the bottom *external* surface of a shoe, which contacts the ground. No issue of damaging an inside of a shoe is raised by HARRISON. To use HARRISON's abrasive surface inside a shoe, however, would be contrary to the that which is known to one skilled in the art, however.

At least for all of the foregoing reasons, reconsideration and withdrawal of the rejection of independent claims 1, 3, and 5 and the claims which depend therefrom, are kindly requested.

F. Withdrawal of Rejection of Dependent Claim 2

Applicants kindly request that the rejection of dependent claim 2 be reconsidered and withdrawn at least for the following reasons.

Claim 2 depends from independent claim 1 and specifies that the lower surface of the inner sole has a recess in which the anti-slip insert is positioned.

This is the only rejection that continues to rely upon POLIFRONI. More specifically, the rejection relies upon POLIFRONI because it discloses recesses 42, 44 for anti-slip inserts 48, 49 and, in the words used in the rejection, teaches "any suitable slip resistant material" for the inserts.

Of course, as explained above, what POLIFRONI discloses as suitable is an insert having "non-slip frictional properties, without tending to damage any surface against which it is placed" (see column 2, lines 3-4).

By contrast, using the abrasive material of HARRISON would tend to damage the surface against which it is placed, particularly if such surface is the inside of a shoe, in contrast to the ground surface upon which HARRISON's abrasive strips are intended to come in contact.

Accordingly, POLIFRONI himself *teaches away* from a modification relied upon in the rejection. At least for this reason, reconsideration and withdrawal of the rejection is requested.

In addition, in the amendment above, Applicants have presented new claim 29, which depends from claim 2. Claim 29 specifies that the abrasive insert is the *only* abrasive insert affixed to the inner sole and such insert is positioned in a recess at least in the metatarsophalangeal articulation area of the inner sole. The combination of POLIFRONI, HARDT, and HARRISON do not result in the invention of claim 29.

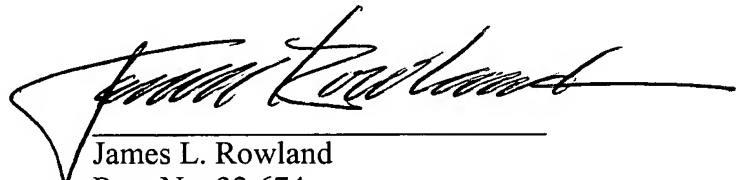
SUMMARY AND CONCLUSION

The grounds of rejection advanced in the Office action have been addressed and are believed to be overcome. Reconsideration and allowance are respectfully requested in view of the amendment and remarks above.

Payment is being made herewith for extra claims and for an extension of time. However, the Commissioner is authorized to charge any fee required for acceptance of this reply as timely and/or complete to Deposit Account No. 19-0089.

Any comments or questions concerning this application can be directed to the undersigned at the telephone number, fax number, or e-mail address given below.

Respectfully submitted,
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